ABSTRACT OF THE DISCLOSURE

An impedance matching circuit (140) includes a capacitive element (C_1, 220), having a capacitance C, coupled in parallel with an output node (215) of the matching circuit, and an inductor (L_1, 225) coupled in series with a transmission line (T_1, 230) between the input node and the output node. The transmission line has a length that, in combination with the inductor, provides impedance substantially equal to the input impedance of the transmission circuit (150) at a frequency of interest. In one embodiment, the inductor is connected to an output (195) of an amplifier (180), and the transmission line is connected to the inductor and to the output (215). The capacitive element is connected to the transmission line such that the length of the transmission line between the inductor and the capacitive element provides the desired inductance.